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FACTORS AFFECTING THE OUTCOME OF TREATMENT OF PULMONARY TUBERCULOSIS IN SUB-OPTIMAL CONDITIONS:

An 18-month Follow-up of 224 Patients

By

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The Management of Patients Previously Delivered by Caesarian Section

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Among 3,500 patients delivered at Lilongwe General Hospital between 1st January, 1968, and 30th September, 1969, there have been 117 patients who had had previous caesarian section. It is our policy to attempt vaginal delivery whenever it appears both possible and safe to do so.

In summary, 43 patients (36.7 per cent.) delivered vaginally, 66 (56.4 per cent.) required repeat section. There were eight cases of ruptured uterus.

The results are presented in Table I.

MANAGEMENT

Antenatal Care

The antenatal care did not differ materially from that of other patients. Great care was taken to explain to the mother the need for regular attendance and eventual delivery in hospital. If possible, the reason for the previous section was ascertained from the patient or her old notes.

No attempt at external cephalic version was made and three of the four breech deliveries that occurred were surprisingly uneventful.

Vaginal examination was made at 36 weeks to assess the pelvic capacity. If contracted pelvis was found, the patient was advised to come for elective section at 38 weeks. If the pelvis seemed adequate, the patient was advised to stay near the hospital, either at home or in the rest house in the grounds. They were told to come to hospital as soon as labour commenced.

Only 84 per cent. of these patients attended the antenatal clinic regularly (on two or more occasions), but it is interesting to note the increasing attendance with the increasing number of sections (92 per cent. with two or more sections).

Table II

ANTENATAL CARE

No. of Caesarian Sections	Antenatal Care	No Antenatal Care	% with Antenatal Care
1	64	16	80
2	26	2	92
3	6	1	85
4	2	0	100
TOTAL	98	19	84

Very few of the patients come for elective section, many preferring to give themselves a "trial" labour first. There is a great social and cultural need to have at least one vaginal delivery to prove one's womanhood!

Labour and Delivery

There were no mishaps during labour apart from one patient. She had had two sections and desperately wanted to deliver normally. She was allowed "trial labour" (despite my better judgment), and signs of impending rupture were noted after two hours. Immediate laparotomy rescued a live baby from a ruptured uterus. Normally labour was not allowed to continue for more than 12 hours after admission. Forceps or vacuum extraction were used on six occasions — for foetal distress or delay of 30 minutes in the second stage. Careful palpation of the lower segment was made vaginally after delivery to exclude rupture.

VAGINAL DELIVERY

Forty-three cases delivered vaginally, and these are sumarrised in Table III. All but six babies were mature full-term infants weighing more than $5\frac{1}{2}$ lb.

There were two neonatal deaths in this group — both from prematurity.

One stillbirth occurred. This patient should have come for elective section, but failed to do so.

Table I

SUMMARY OF RESULTS

Number of Previous Caesarian Sections	Present Delivery			Perinatal Mortality		
	Repeat Section	Vaginally	Ruptured Uterus	Still-born	Neonatal Death	Maternal Death
1	35	41	4	4	4	4
2	23	1	4	3	0	0
3	6	1	0	0	0	0
4	2	0	0	0	0	0
TOTALS	66	43	8	7	4	4

She arrived at the hospital in labour and fully dilated. Breech presentation was found and there was no foetal heart. She was allowed to progress normally, but perforation of the aftercoming head was necessary before the delivery could be completed.

Table III

METHOD OF VAGINAL DELIVERY

Normal Delivery	33
Breech Extraction	4
Forceps	3
Vacuum Extraction	3
TOTAL	43

There was no maternal mortality in these patients.

The reasons for previous section in this group are summarised in Table IV.

Table IV

REASON FOR PREVIOUS SECTION

Prolonged Labour	8
Placenta Praevia	9
Transverse Lie	4
Contracted Pelvis	3
Twins? malpresentation	2
Prolapsed Cord	1
Eclampsia	1
Primip. Breech	1
Uncertain	14

It was assumed that "long labour" was due to cephalo-pelvic disproportion, as most of the patients stated they had had a "big" baby. However, uterine inertia may have accounted for some. Three cases of definite contracted pelvis are included. One has already been mentioned — the assisted breech delivery — and one had a premature baby. The third had had a symphysiotomy performed since the first section and had no difficulty in delivering a 7 lb. 11 oz. baby. One patient had two previous sections, but did not know why. She delivered a 7 lb. 4 oz. baby without difficulty.

Another patient had had three sections. The first for eclampsia. The second on the principle "Once a caesar always a caesar". The third because of the previous two. She was admitted for elective section. She desperately wanted a vaginal delivery, and as the pelvis seemed adequate I reluctantly agreed. The mebranes were ruptured and she proceeded to deliver a 7 lb. baby within the next four hours without assistance.

REPEAT SECTION

Usually the dictum "Twice a caesar always a caesar" is followed (Donald, 1966). However, this rule need not be absolute, as our two cases demonstrate and as was shown by Riva and Teich (1960).

The reasons for repeating the section are presented in Table V.

Table V

INDICATIONS FOR REPEAT SECTION

Two or more previous sections	29
Major contracted pelvis	27
Transverse Lie	3
Foetal Distress	3
Inertia—both with Breech Presentation	2
Face Presentation	1
Placenta Praevia	1
TOTAL	66

An overall section rate of 5-6 per cent. would indicate a higher number of patients with previous section should have come for delivery during this time. It is surmised that perhaps these delivered normally elsewhere.

This would suggest a figure of nearer 50 per cent. requiring repeat section. A recent series reported in the United Kingdom puts the figure at 12 per cent. (McGarry, 1969).

The high number of repeat sections in this series is not regarded as a failure of policy. It demonstrates the large number of cases with major degrees of contracted pelvis, in this country, which could not have been delivered in any other way.

PERINATAL MORTALITY

There were seven stillbirths and four neonatal deaths, an incidence of 94 per 1,000 births. The causes are listed in Table VI and classified according to antenatal care in Table VIII.

All the stillbirths were cases of intra-uterine death prior to admission.

The perinatal mortality is slightly less than our overall figure for 1968 of 118 per 1,000 births.

Table VI

CAUSES OF PERINATAL MORTALITY

Ruptured Uterus	4
Prolonged Labour	1
Malpresentation	2
Anencephally	1
Prematurity	2
Respiratory Distress	1
TOTAL	11

Table VII

CAUSES OF MORTALITY CLASSIFIED ACCORDING TO ANTENATAL CARE

	Perinatal Deaths	Maternal Deaths
Antenatal Care	6 (6%)	2 (2%)
No Antenatal Care	5 (25%)	2 (10%)

MATERNAL DEATHS

These are summarised in Table VIII.

Table VIII

CAUSES OF MATERNAL DEATH

Ruptured Uterus	2
Internal Haemorrhage	1
Post Partum Haemorrhage	1

CASE REPORTS

(i) Ruptured Uterus.—The patient had been delivered previously by lower segment section for contracted pelvis. She did not come to antenatal clinic and waited at home hoping to deliver normally. She arrived with signs of uterine rupture. She died soon after operation, at which rupture of the scar was found.

(ii) Ruptured Uterus.—This patient, para. 9, had had 1 LSCS ? reason ? which delivery. She was transferred from another hopsital outside our area with transverse lie and prolapse of the arm. Ruptured uterus was suspected. At laparotomy a posterior rupture was found. The scar was intact. The patient died soon after operation.

(iii) ? Internal Haemorrhage.—This patient had had 1 LSCS for transverse lie. She attended antenatal clinic and came in labour again with transverse lie. At repeat section difficulty was experienced in achieving haemostasis. She collapsed and died four hours post-operatively — it was assumed, from further bleeding (no p.m.).

(iv) Post-Partum Haemorrhage.—Para. 1 LSCS for transverse lie. Contracted pelvis was diagnosed; she was admitted for elective LSCS. Gross adhesions were found over the previous classical scar. It was impossible to divide them all. Massive post-partum bleeding occurred. It was thought that perhaps the adhesions interfered with uterine retraction.

RUPTURE OF THE SCAR

There were seven cases of scar rupture with one case of maternal death (described above) and four stillbirths (Table IX).

Five of these patients had attended the antenatal clinic and three live babies were delivered at

Table IX

INCIDENCE AND TYPE OF PREVIOUS SECTION

LSCS	1	2
	2	1
Classical	1	1
	2	3
TOTAL	6	7

laparotomy from this group, despite complete rupture of the uterus.

One of them had a spontaneous rupture at 36 weeks of an uterus weakened by two previous classical sections.

Two patients ruptured at the very onset of labour. These cases are described more fully elsewhere (Armon, 1969).

Donald (1966) states that rupture of the lower segment scar is rare. Peel and Chamberlain (1968) report an incidence of only 1 per cent. in the United Kingdom teaching hospitals. Perhaps the high incidence of rupture in this series is due to the far from perfect conditions under which the first section is often done, in the presence of gross sepsis and maternal anaemia, although Douglas (1967) denies that sepsis plays any part.

It is stated that scar rupture becomes more likely with increasing parity, hydrammios, twins and a large baby (Feeny and Barry, 1956). This must always be borne in mind.

CONCLUSION

A series of 117 patients with previous caesarian section is presented. It is shown that perhaps only 50 per cent. require repeat section. With careful antenatal and intrapartum care there was no maternal or perinatal mortality due to vaginal delivery.

The importance of explaining the reason for the original operation to the patient and the need for subsequent antenatal care and hospital delivery must be emphasised.

The question remains as to whether caesarian section should be avoided as far as possible in the first place, if the incidence of ruptured uterus and maternal death is to be reduced.

Using the criteria of Lawson and Stewart (1967), we are using symphysiotomy as an alternative procedure and thereby hope to reduce the number of caesarian sections performed.

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